



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: WEI SHAO et al.

Art Unit: 1646

Serial No.: 09/804,472

Examiner: N. Basi

Filed: March 13, 2001

Atty. Docket: CL001163

For: ISOLATED HUMAN TRANSPORTER
PROTEINS, NUCLEIC ACID MOLECULES
ENCODING HUMAN TRANSPORTER
PROTEINS, AND USES THEREOF

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Response to Office Action

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action issued by Examiner Basi on June 3, 2001, Applicants request reconsideration of the above-referenced patent application in view of the following amendments and remarks. A Two-Month Extension of Time is filed herewith.

In the Specification:

Replace the entire section of “DESCRIPTION OF THE FIGURE SHEETS” on page 10 (line 9 to line 27).

DESCRIPTION OF THE FIGURE SHEETS

FIGURE 1 (FIGURE 1A-Figure 1C) provides the nucleotide sequence of a cDNA molecule that encodes the transporter protein of the present invention. (SEQ ID NO:1) In addition structure and functional information is provided, such as ATG start, stop and tissue distribution, where available, that allows one to readily determine specific uses of inventions based on this molecular sequence. Experimental data as provided in Figure 1 indicates expression in humans in teratocarcinomas of neuronal precursor cells, embryos (particularly in the head), duodenal adenocarcinomas of the small intestine, small and large cell carcinomas of the lung, breast tissue, Schwannoma tumors, brain tumors, and testis.

FIGURE 2 (FIGURE 2A-Figure 2E) provides the predicted amino acid sequence of the transporter of the present invention. (SEQ ID NO:2) In addition structure and functional information such as protein family, function, and modification sites is provided where available, allowing one to readily determine specific uses of inventions based on this molecular sequence.

FIGURE 3 (FIGURE 3A-3CC) provides genomic sequences that span the gene encoding the transporter protein of the present invention. (SEQ ID NO:3) In addition structure and functional information, such as intron/exon structure, promoter location, etc., is provided where available, allowing one to readily determine specific uses of inventions based on this molecular sequence. As illustrated in Figure 3, SNPs were identified at 27 different nucleotide positions.